

CLAIMS

1. Elevator emergency stop device, comprising:

a guide rail guiding an elevator cage; and

a wedge-shaped element that effects emergency stop of

5 said elevator cage by frictional force by means of a sliding part thereof being pressed against said guide rail,

wherein said wedge-shaped element comprises a mechanism whereby a dimension in the direction perpendicular with respect to faces along which said guide rail and said
10 sliding part slide is changed in accordance with braking force.

2. Elevator emergency stop device according to claim 1,

wherein said wedge-shaped element comprises:

15 a fixed part having an outside inclined face part of said wedge-shaped element; and

a wedge-shaped moveable part having said sliding part;

said moveable part being moveable along an inside inclined face part of said fixed part and an upper part

20 thereof being engaged with said fixed part by means of a resilient element.

3. Elevator emergency stop device according to claim 2,

wherein in said wedge-shaped element said fixed part

25 and said resilient element, and said resilient element and said moveable part are engaged by means of respective

sliding elements between said resilient element and said moveable element and between said resilient element and said fixed element.

5 4. Elevator emergency stop device according to claim 2 or 3,

 wherein in said resilient element a relationship between a load and a flexure is such that said flexure is small or zero up to a prescribed load and above said
10 prescribed load said relationship between said load and said flexure is a practically proportional relationship.

 5. Emergency stop device according to claim 4,

 wherein said resilient element comprises a piston in
15 which is sealed gas that is given an initial pressure.